

IN THE CLAIMS

1.(Currently Amended) A sensor comprising:

 a diaphragm, wherein at least on one side the diaphragm further comprises a surface which reflects a light beam;

 a first optical waveguide being constructed on said side as a transmitting waveguide, through which a light beam passes and strikes against the diaphragm;

 a second optical waveguide being constructed at a specific angular relationship with respect to the first optical waveguide, said second optical waveguide having the function of a receiving waveguide and into which light reflected from the diaphragm enters; and

a focusing lens which is melted onto an end of the first optical waveguide in such a manner that the light beam reflected from the one side of the diaphragm is focused onto the end face of the second waveguide ~~optical means being constructed in the light path between said diaphragm and said receiving waveguide in such a manner that the light beam is focussed on the end face of the receiving waveguide by said optical means.~~

2.(Original) The sensor according to Claim 1, wherein the sensor is a microphone.

3. (Cancelled)

4. (Original) The sensor according to Claim 1, wherein the focusing lens system is a glass body.

5. (Original) The sensor according to Claim 1, wherein the focusing lens system is a spherical lens, a biconvex or a planoconvex lens, a cylinder lens or a lens made from SU8.

6. (Original) The sensor according to Claim 1, wherein the focusing lens system is drop-shaped and/or has a circular cross section.